

NEW RECORDS OF ANGIOSPERMS FROM SOUTHERN NEW MEXICO

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ABSTRACT

New records for New Mexico are reported for fifteen angiosperms.

KEY WORDS: New Mexico, angiosperms, range extensions

The relatively wet spring of 1993, and collecting activities particularly by McIntosh in little-collected parts of southern New Mexico very near the Arizona border, have resulted in fifteen records for New Mexico not reported in Martin & Hutchins (1980, 1981) or Spellenberg *et al.* (1986). A number of the collections come from within a few meters of the Arizona state line. Even though the New Mexico records represent eastward range extensions of several km or more from known points in southeastern Arizona, several of the species were observed in Arizona in the vicinity of the New Mexico collections.

ASTERACEAE

Brickellia amplexicaulis B. Robins. New Mexico. Hidalgo Co: ca. 1/4 mi. E of center of Sec. 33, T31S, R18W, elev, 5550 feet [Animas Mts.]; perennial forb scattered on 10° S-facing very rocky rhyolitic slope, 1 Oct 1992, McIntosh 2444 (NMC).

Comment: First record for New Mexico, a ca. 60 km eastward range extension from known populations in southeastern Arizona for a species previously known from southern Arizona and northern México.

Brickellia coulteri A. Gray. New Mexico. Hidalgo Co: NWNW Sec. 24, T27S, R21W, Antelope Pass, Peloncillo Mountains, elev. 4600 feet. Two foot straggling shrub common under slight overhang of volcanic tuff rock on a southern exposure, 1 Apr 1993, *McIntosh 2613* (NMC).

Comment: First record for New Mexico, a range extension of ca. 15 km from Graham Co., Arizona, where the species is known from the Peloncillo Mts., 20 mi. E of Safford, Arizona (*McGuire 4/11/35* [ARIZ]). The species also closely approaches New Mexico in El Paso Co., Texas (*Worthington 9219* [ARIZ,UTEP]).

Coreopsis californica (Nutt.) Sharsmith var. *newberryi* (A. Gray) E.B. Smith. New Mexico. Hidalgo Co: sec. 6, T18S, R21W, a few feet east of the Arizona state line near the Carlisle Mine road approx. 6 air miles NW of Virden, New Mexico, elev. 4190 feet. Soil was loamy, gravelly "river breaks" type on level to gentle southeast-facing slopes, 30 Mar 1993, *McIntosh 2559* (NMC).

Comment: First record for New Mexico, a range extension of ca. 60 km from Graham Co., Arizona. Only one plant was seen. Smith (1984) notes all collections to be from Arizona.

Hypochaeris radicata L. New Mexico. Hidalgo Co: Animas, by a fence at high school football field, elev. 1342 m, 28 May 1992, *McIntosh 2056* (NMC).

Comment: First record for New Mexico for this European plant. Neither Kearney *et al.* (1960) nor Correll & Johnston (1970) list the species for their respective floras, although the species is now known from Texas (Johnston 1990).

Melampodium strigosum Stuessy. New Mexico. Hidalgo Co: Peloncillo Mts., Coronado Natl. Forest, in upper Clanton Draw along Forest Road 63, 0.4 rd. mi. NE of crest over mts, (NW1/4 sec. 24, T32S, R22W), 5700 ft. elev., 20 Sep 1986, *Worthington 15104* (NMC,UTEP); SWNW sec. 33, T31S, R18W, on E side of Animas Mountains, elev. 5680 feet. Common annual on 10° NE-facing gravelly rhyolitic slope; most common in level gravelly pockets with a little soil development, 3 Sep 1992, *McIntosh 2280* (NMC).

Comment: First report for New Mexico, a range extension of ca. 60 km from known populations in the Chiricahua Mts. of southeastern Arizona (Stuessy 1972, map, p. 52). The species is widespread in México, and also occurs in western Texas.

Pentzia incana (Thunb.) O. Kuntze. New Mexico. Doña Ana Co: 43 air km NNE of Las Cruces on the west side of the San Andres Mts., near Ropes Spring, 1730 m elev., 10 May 1993, *Brouillet & Miller 93-293* (MT,NMC); same locality, 15 May 1993, *Brouillet, Spellenberg, & Miller* (BRIT,GH,K, MEXU,MO,MT,NMC,NY,TEX,UC,UNM).

Comment: First record for New Mexico for this South African species. According to Kearney *et al.* (1960) the species was planted by the U.S. Soil Conservation Service near Safford, Graham Co., Arizona, where it was reported as tending to seed itself. The New Mexico plants occupy an area of perhaps 150 m² in an area of past disturbance on a rounded ridge that is part of a dissected outwash fan. There had been considerable activity in the area associated with White Sands Missile Range, probably in the early 1950's, but the site is rarely visited now. The largest plants had many stems, and were up to about 3 dm tall and 5-6 dm in diameter; size classes in the population suggest occasional successful establishment of seedlings. An extensive search of the area revealed no other plants of this species, nor has it been collected in rather extensive floristic surveys of the Missile Range during the past 5 years.

BORAGINACEAE

Cryptantha nevadensis Nels. & Kenn. New Mexico. Grant Co: 2 mi. NE of Red Rock on gravelly mesa slopes, *Gutierrezia* dominant, *Maguire et al. s.n.* (ARIZ); SE sec. 33, T17S, R21W, approx. 6 air miles north of Virden, elev. 4400 feet, 15 Apr 1993, *McIntosh & Brouillet 2641* (NMC); Hidalgo Co: sec. 6, T18S, R21W, ca. 6 air miles NW of Virden on the road leading to Carlisle Mine, several yards E of the state line, elev. 4190 feet, occasional, 30 Mar 1993, *McIntosh 2560* (NMC); 15 Apr 1993, *McIntosh & Brouillet 2636* (NMC).

Comment: First record for New Mexico, a range extension of a few km from adjacent Arizona. The early record appears to have been overlooked in the preparation of the Arizona Flora (Kearney & Peebles 1960).

BRASSICACEAE

Caulanthus lasiophyllus (Hook. & Arn.) Payson. New Mexico. Hidalgo Co: Sec. 6, T18S, R21W, approx. 6 air miles northwest of Virden on the road leading to Carlisle Mine, several yards E of the state line, elev. 4190 feet. Plants scattered on very gently southeast-facing loamy gravelly slope, 15 Apr 1993, *McIntosh & Brouillet 2635* (NMC).

Comment: First record for New Mexico, a range extension of ca. 70 km from near Thatcher, Graham Co., Arizona. The species is widespread in western North America.

Coronopus didymus (L.) I.E. Smith. New Mexico. Doña Ana Co: Las Cruces, E side of Locust Street between Calle de Sueños and Foster Rd., crack in sidewalk, 19 Apr 1992, *McIntosh 1949* (NMC).

Comment: First record for New Mexico for this widespread plant of eastern North America. Correll & Johnston (1970) report it for eastern and southern Texas.

CARYOPHYLLACEAE

Stellaria nitens Nutt. New Mexico. Grant Co: SWSE sec. 33, T17S, R21W, about 6 air miles north of Virden, elev. 4400 feet. NW-facing 10° rhyolitic slope, 30 March 1993, *McIntosh 2578* (NMC).

Comment: First record for New Mexico, a southeastward range extension of ca. 140 km from near Coolidge Dam, Graham Co., Arizona. We assure the botanical community that we have it right this time (see Madroño 28:87, 1981, for "first record;" Madroño 38:301, for retraction).

PAPAVERACEAE

Papaver rhoeas L. New Mexico. Hidalgo Co: immediately east of the Arizona border west of Virden, on highway shoulder, elev. 3750', 11 Jun 1992, *McIntosh 2123* (NMC).

Comment: First record for New Mexico for this Eurasian plant that is now widespread in North America.

POLYGONACEAE

Chorizanthe brevicornu Torrey. New Mexico. Hidalgo Co: Sec. 6, T18S, R21W, a few feet east of the Arizona state line near the Carlisle Mine road ca. 6 air miles NW of Virden, elev. 4190 feet, loamy, gravelly "river breaks" on level to gentle southeast-facing slopes, plants scattered, 30 Mar 1993, *McIntosh 2564* (NMC).

Comment: First record for New Mexico, a range extension of ca. 90 km from near Ft. Thomas, Graham Co., Arizona. The species is widespread in the deserts of Arizona, California, and Nevada.

Eriogonum capillare Small. New Mexico. Hidalgo Co: NWNW sec. 8, T18S, R20W, ca. 6 mi. NE of Virden, elev. 4560 feet, common on gravelly basaltic andesite dike with *Acacia greggii*, *Quercus turbinella*, *Acacia constricta*, *Mimosa biuncifera*, 11 Aug 1992, *McIntosh et al. 2193* (NMC); T18S, R20W, corner secs. 5,6,7,8, 2.5 mi. S of Steeple Rock, dark andesite with *Acacia greggii*, *Juniperus monosperma*, *Eriogonum wrightii*, *Aristida*, 11 Aug 1992, *Sivinski et al. 1946* (UNM).

Comment: First report for New Mexico, a range extension of ca. 160 km to the SE from Peridot, Graham Co., Arizona. Reveal (1976) considers the plant to be rare. There were thousands of plants at the New Mexico site. Although label information is slightly different, both collections come from the same site at the same time.

Eriogonum maculatum Heller. New Mexico. Hidalgo Co: sec. 6, T18S, R21W, ca. 6 air miles NW of Virden on the road leading to Carlisle Mine, several yards east of the state line, elev. 4190 feet. Plants scattered in annual understory of mostly *Bromus rubens*, 15 Apr 1993, *McIntosh & Brouillet 2632* (BRIT,MT,NMC,NY,UNM).

Comment: First record for New Mexico, a range extension of ca. 90 km from near Ft. Thomas, Graham Co: Arizona. The species is widespread in the western United States.

SCROPHULARIACEAE

Castilleja exserta Heller, Chuang, & Heckard subsp. *exserta*. New Mexico. Hidalgo Co: SENW sec. 14, T23S, R21W, between Lordsburg Playa and Peloncillo Mts., elev. 4300 ft., common in localized area on loamy, gravelly, nearly level soil near pipeline, 14 Apr 1993, *McIntosh 2619* (NMC).

Comment: First record for New Mexico, a range extension of ca. 90 km from near Ft. Thomas, Graham Co., Arizona. The species, until recently known as *Orthocarpus purpurascens* Chuang & Heckard 1991), is widespread in Arizona, California, and Baja California.

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